

APPLICANT'S REMARKS

Claims 28-35, 37-39, 41-49, 51-53, 55 and 56 are currently pending in the application of which claims 28, 42 and 56 are independent claims.

Rejections of the Claims

Claims 28-35, 37-39, 41-49, 51-53, 55 and 56 were rejected under 35 U.S.C. §103(a) as being anticipated U.S. Patent No. 5,862,223 to Walker et al (“Walker”). Applicant will address this rejection below.

Rejection Under 35 U.S.C. §103(a)

As set forth below, Applicant submits that the claims are patentable over the prior art cited. Therefore, the rejection of claims 28-35, 37-39, 41-49, 51-53, 55 and 56 under 35 U.S.C. §103(a) is improper, and Applicant respectfully requests that this rejection be withdrawn.

Walker describes a method that matches experts with persons seeking expert advice. These experts provide answers to questions posed by outside users. The present invention, on the other hand, describes an invention that encapsulates a digital business contract for manufacturing services that spans multiple manufacturing vendors and multiple manufacturing disciplines.

The present patent application describes a system where an engineering specification, associated with a graphical feature, is presented to one or more manufacturing vendors so that the vendor(s) may determine if the vendor(s) can perform to the standard required by the specification. When the engineering specifications are presented to a manufacturing vendor, there is no “answer” to be provided except where the manufacturing vendor digitally signs a

particular specification indicating that he or she is capable of meeting the specification. In the present invention the answer is either “Yes” or “No,” whereas the Walker patent describes a true “expert” answer that provides the questioner with expert information – information far removed from a simple “Yes, I can perform to the required specification” or “No, I cannot perform to the required specification.”

The current claims are patentable in view of the disclosure of Walker because the contexts of the information provided by the respective systems are vastly different from one another. One must understand that an “expert” response of “yes, I can meet the specification” or “no, I cannot” is not in keeping with the spirit or the description of the Walker patent. In fact, the responses given in the presents claims are not really “answers” at all but digital signatures that acknowledge understanding. The “expertise” is already embodied in the information presented by the consumer of manufacturing services (allegedly Walker’s “end-user”).

Furthermore, the current claims include a case where an engineer employed by the consumer of manufacturing services (allegedly Walker’s “end-user”) checks the various specifications for accuracy and then applies a digital signature. Walker describes the case where an expert is hired to grade student assignments. There is no conflict in the claims because the engineer that signs off on the specifications in the present invention is an employee of Walker’s “end-user,” not the “expert.”

The specification of Walker describes “Applications of the Invention,” where none of the examples mention a manufacturing application. Furthermore, Walker does not refer to the specific act of applying a digital signature to a sub-element within a three-dimensional graphical representation. Walker does not anticipate this feature of the present claims. The only disclosure of such a feature is disclosed in Applicant's invention.

The Office Action admits that Walker fails to point out or suggest the rendering of a three-dimensional representation for an article design, but asserts that Walker does state that applications are available to build information solutions for digital information including text, images, and multimedia types.

The present application clearly describes the context in which the three-dimensional graphical information is used. Walker neither anticipates nor describes the vital importance of graphical information in the interaction between a consumer of manufacturing services (allegedly Walker's "end-user") and the provider of services (allegedly Walker's "expert"). As described in the present application, the graphical information involved in the end-user's interaction with a manufacturing expert is part of the legal contract created between the consumer of manufacturing services and the provider of services.

The examiner states that "... the use of three-dimensional images or representations in computer-based processes or electronic commerce environments will only enhance the designing and planning aspect." This view does not take into account the fact that in manufacturing, graphical information, whether in two-dimensional form as in an engineering drawing or in three-dimensional form, is an inseparable part of the legal contract between the consumer of manufacturing services and the provider. The present claims recite this vital aspect of graphical information with respect to accuracy of graphical representations, the quality of the manufacturer's interpretation of the graphical information (and associated specifications), and the post-manufacture verification that the manufactured article is produced according to the requirements described in the graphical representation. The term "legally-binding," which appears in dependent claim 29, for example, is not found in the Walker claims literally or in the abstract with respect to the inclusion of graphical information.

The examiner states that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to have presented three-dimensional image representations to the experts or vendors so that they can better visualize and interpret the desired request.” However, this ignores the actual teachings of Walker, which specifically describe either mailing requests in paper form or scanning a request for digitization. [Col. 19, lines 6-12]. There is absolutely no suggestion of using “a three-dimensional representation of an article design” anywhere in Walker. The present claims go far beyond the simple “representation” of the graphical information that one of ordinary skill in the art might infer from the disclosure in Walker. The various dependent claims recite that the collection of digital signatures associated with the graphical representation may not only comprise a legally binding contract with one manufacturer expert, but potentially a group of separate and distinct manufacturer experts. In other words, the same graphical representation, with its sub-elements, may be presented by a single consumer of services (allegedly Walker’s “end-user”) to a range of manufacturers (allegedly Walker’s “experts”), each having a different body of “expertise.” The present invention is directed to a single, contiguous legal contract that spans multiple, independent manufacturing vendors where the three-dimensional graphical information is a central and inseparable component. Walker does not describe graphical representation as a part of a legally binding contract between parties. Nor does Walker describe a one-to-many correspondence between end-user and expert with respect to graphical representations in any permutation, including legal.

In addition, Walker does not disclose a digital signature mapped to “manufacturing instructions” that are associated with at least one feature within a three-dimensional representation, as required in independent Claims 28, 42 and 56. Throughout Walker, references

are made to “questions” requiring “expert answers.” However, the term “manufacturing instructions,” as used in this context, is not ambiguous and does not indicate a question as required by Walker. An example of a “manufacturing instruction” is: “Hole Diameter = 0.7500in +/- 0.0001in.” There is no “expert” insight required on the part of the evaluator (*e.g.*, manufacturing vendor) digitally signing the instruction. The only acceptable response is whether or not the manufacturing vendor can make the hole according to the instruction. As indicated in the claims, the applied digital signature then becomes a component of the legally-binding contract between the consumer of manufacturing services and the provider. In the quality assurance variant, the digital signer is indicating whether or not the hole in a physical example of the subject article was made in accordance with the manufacturing instruction. Nothing in the Walker specification describes this mechanism.

For at least these reasons, Applicant submits that independent claims 28, 42 and 56, and the claims that depend therefrom, are patentable over the prior art of record. Therefore, Applicant requests that the rejections be reconsidered and withdrawn, and the claims passed to issue.

CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated grounds for objection and rejection have been overcome. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution. Applicant believes that no further fees are due with this reply. Should any fees be due, Applicant authorizes the PTO to charge our Deposit Account No. 23-1951.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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